

IN THE CLAIMS

The claims as currently presented and under consideration, are presented below.

1-10 (Cancelled)

11. (Previously presented): A modified xylanase comprising a polypeptide having an amino acid sequence as set forth in SEQ ID NO:1, comprising amino acid substitutions at positions 2, 28, 58, and +191, further comprising at least one other substituted amino acid residue at a position selected from the group consisting of: 5, 7, 10 , 11, 16, 19, 22, 26, 29, 30, 34, 36, 38, 57, 61, 63, 65, 67 92, 93, 97, 105, 108, 110, 111, 113, 132, 143, 144, 147, 149, 151, 153, 157, 160, 162, 165, 169, 180, 184, 186, 188, and 190, wherein the position of the substituted amino acid is numbered from the amino acid after the signal and pro sequence, wherein said modified xylanase has at least 90% sequence identity to SEQ ID NO:1 and has xylanase activity.

12. (Previously presented): The xylanase according to Claim 11, wherein the at least one other substitution is at residue 144.

13. (Previously presented): The xylanase according to Claim 12, wherein the substitution is H144C, or H144K.

14. (Previously presented): The xylanase according to Claim 13, wherein the xylanase has at least an additional substitution selected from the group consisting of: H22K, S65C, N92C, V108H, F93W, N97R F180Q and S186C.

15. (Currently amended): The xylanase according to Claim 13, wherein the xylanase has the following mutations: H144C and N92KN92C.

16. (Previously presented): The xylanase according to Claim 13, wherein the xylanase has the following mutations: F180Q, H144C and N92C.

17-19 (Cancelled)

20. (Original): The xylanase according to Claim 13, wherein the xylanase has the following mutations: H22K, F180Q, H144C and N92C.

21-26. (Cancelled):

27. (Previously presented): A modified family 11 xylanase comprising an amino acid sequence, the amino acid sequence having a substituted amino acid residue at a position equivalent to 144 in SEQ ID NO: 1, wherein the position of the substituted amino acid is numbered from the amino acid after the signal and pro sequence, wherein said modified xylanase has at least 90% sequence identity to SEQ ID NO:1 and has xylanase activity.

28. (Cancelled)

29. (Previously presented): The xylanase according to Claim 27, wherein the amino acid sequence has at least one further substituted amino acid residue at a position equivalent to a position selected from the group consisting of: 2, 22, 28, 58, 65, 92, 93, 97, 105, 108, 162, 180, 186 and +191.

30-39 (Cancelled)

40. (Previously presented) The xylanase of claim 12, further comprising an additional substitution at a position selected from the group consisting of: 22, 65, 92, 93, 97, 105, 108, 144, 162, 180, and 186.

41. (Previously presented) The xylanase of claim 27, further comprising at least one substituted amino acid residue at a position equivalent to a position selected from the group consisting of: 2, 5, 7, 10 , 11, 16, 19, 22, 26, 28, 29, 30, 34, 36, 38 , 57, 58, 61, 63, 65, 67, 92, 93, 97, 105, 108, 110, 111, 113, 132, 143, 147, 149, 151, 153, 157, 160, 162, 165, 169, 180, 184, 186, 188, 190 and +191.

42. (Cancelled)

43. (New) The xylanase of claim 11, wherein the at least one other substitution is selected from the group consisting of: H144C, H144K, H22K, S65C, N92C, V108H, F93W, N97R, F180Q and S186C.

44. (New) The xylanase of claim 11, wherein the modified xylanase has increased thermostability or pH-stability at high pH with respect to the corresponding wild-type xylanase.